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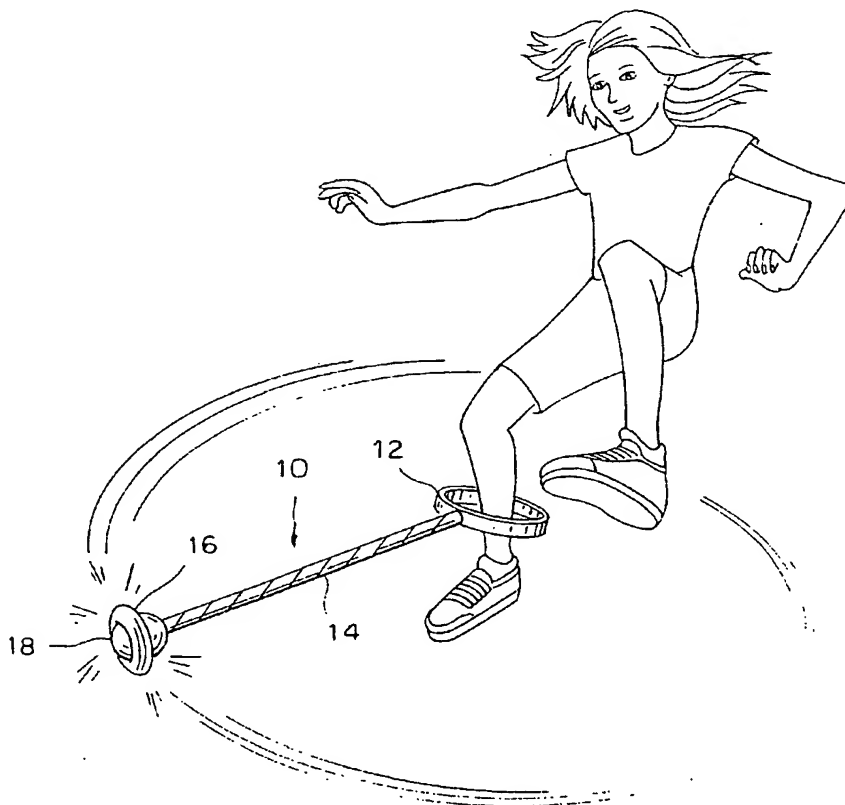
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- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: AMUSEMENT DEVICE OR PLAYTHING



(57) Abstract: An amusement device (10), particularly for use by children for jumping or skipping, has a ring (12) through which one foot is placed, and a tube or rod (14) extending therefrom with a wheel (16) at the far end of the rod or tube. The wheel contains some small lamps and a generator, whereby rotation of the wheel causes the lamps to light. The connector rod or tube is wrapped with holographically printed film (22).

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AMUSEMENT DEVICE OR PLAYTHING

[0001] The present invention relates to an improvement in a game or amusement device particularly used by children for jumping or skipping, and having a ring through which one foot is placed, and whereby the user rotates the ring part of the device about the foot while hopping over an elongated element which extends from the ring.

[0002] Devices of the above general type are known, and these include the aforementioned ring at one end, the elongated element, e.g. a rope-like element, hereinafter referred to as a "connector" extending therefrom, and a wheel, e.g. a counter-wheel, at the opposite end of the connector from the ring. The wheel provides both a weight at the opposite end of the connector so as to provide more efficient swinging of the device about the ankle of the user due to the effects of centrifugal force, and also rotates along the ground or other supporting surface in which the device is used, e.g. about an axis generally concentric with the connector.

[0003] Wheels containing light generating means are known for use in other devices as disclosed in the U.S. patents to Hegyi 4,648,610; Hall 3,548,185; and Gordon 6,220,733, the contents of all of which are incorporated herein by reference.

[0004] The present invention is directed to an amusement device of the type indicated above wherein the wheel lights up when it is rotated, and more particularly such an amusement device which does not need a battery and instead uses means within the wheel for generating light, e.g. in accordance with one of the aforementioned patents, or some other type of generator.

[0005] For a more complete understanding of the present invention, reference is now made to the following description

of an embodiment of the invention taken in conjunction with the accompanying drawing figures, in which:

[0006] Fig. 1 is a perspective view of a device according to the present invention;

5 [0007] Fig. 2 is an end view thereof; and

[0008] Fig. 3 is a perspective view of the device in use.

[0009] An amusement device 10 according to the present invention comprises a ring 12 through which one foot of the user is placed as shown in Fig. 3 for rotation about the leg or ankle of the user, the ring 12 having a connector 14 extending therefrom, the connector 14 preferably being in the form of a relatively rigid or semi-rigid rod or tube. At the opposite end of the connector 14 there is mounted a wheel 16 freely rotatable about its axis which is preferably concentric with the connector rod or tube 14.

[0010] In a preferred embodiment, the wheel has a pair of hubs 18 which rotate therewith when the wheel rotates during use of the device as the wheel moves along the surface of use, e.g. the ground or a floor. One end of the connector rod or tube 14 is received within the inner of the two hubs 18, internal structure (not shown) of the wheel 16 supporting the connector rod 14 so that the wheel 16 and the hubs 18 can rotate relative thereto.

[0011] The wheel 16 is formed of a transparent or translucent plastic, preferably a hard plastic such as acetal resin, polycarbonate, high impact polystyrene, etc., and may be in accordance with the aforementioned Hegyi USP '610 or the aforementioned Hall USP '185. As shown in Fig. 2, a series of small lamps 20 are provided internally of the wheel 16 and project radially from the axis thereof, the magneto power source (not illustrated) being provided between or within the hubs 18.

[0012] The connector rod or tube 14 is wrapped with a decorative film, preferably a holographic printed plastic film

22 and/or 24, preferably both, to provide a visual effect analogous to a barbershop pole, but with the enhanced effects of the holographic film printed with iridescent sparkles 25 and/or other decorative effects in the form of diffraction rulings to provide scintillating color changes. The combination of the light emitting lamps and the holographic film as the device is used provides a spectacular display. Even the lighting effects produced by the wheel alone, not taking into account the holographic cover film(s) of the connector rod or tube 14, are quite different than the effects produced by battery powered lights.

[0013] The connector 14 is preferably, but not necessarily, a plastic tube formed of a rigid or semi-rigid material, such as vinyl plastic, ABS polymer, polyethylene or the like. The ring 12 is desirably made of a softer and less rigid plastic than the connector tube 14, e.g. soft vinyl plastic or a polyethylene somewhat softer than that used in the connector 14. Of course, more expensive materials such as reinforced plastics can be used, but are not preferred. The plastic film having a holographic appearance is preferably provided in two parts and is wrapped about the connector rod or tube 14 in the nature of a barber's pole.

[0014] In addition to the improved visual effects which are achieved in the present amusement device 10 from the combination of the holographic printed film and the light emitting lamps, the present device 10 has an added advantage in that there is no need to ever replace any batteries.

[0015] The foregoing description of the specific embodiments will so fully reveal the general nature of the invention that others can, by applying current knowledge, readily modify and/or adapt for various applications such specific embodiments without undue experimentation and without departing from the generic concept, and, therefore, such adaptations and modifications should and are intended to be

comprehended within the meaning and range of equivalents of the disclosed embodiments. It is to be understood that the phraseology or terminology employed herein is for the purpose of description and not of limitation. The means, materials, and steps for carrying out various disclosed functions may take a variety of alternative forms without departing from the invention.

**WHAT IS CLAIMED IS:**

1. An entertainment device comprising an elongated connector, a ring at one end and a rotatable wheel at the other end of the connector, wherein the rotatable wheel  
5 contains lamps which are powered by a generator.
2. The device of claim 1 wherein the connector is rigid or semi-rigid.
3. The device of claim 1 or claim 2 wherein the  
connector is covered with plastic film having a holographic  
10 appearance.
4. The device of claim 3 wherein the film is in two parts wrapped like a barber's pole.

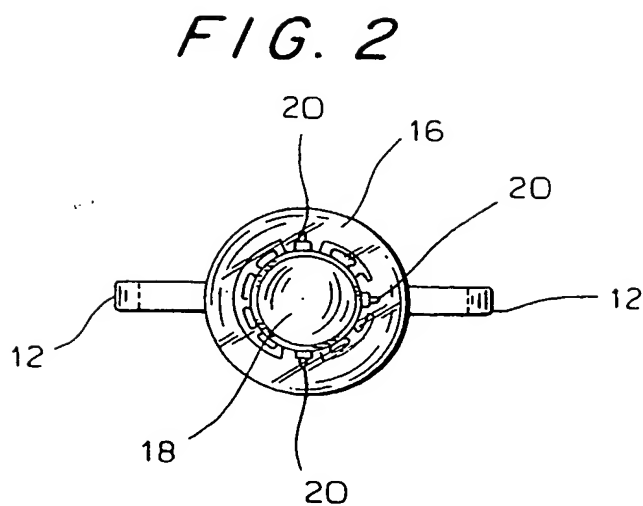
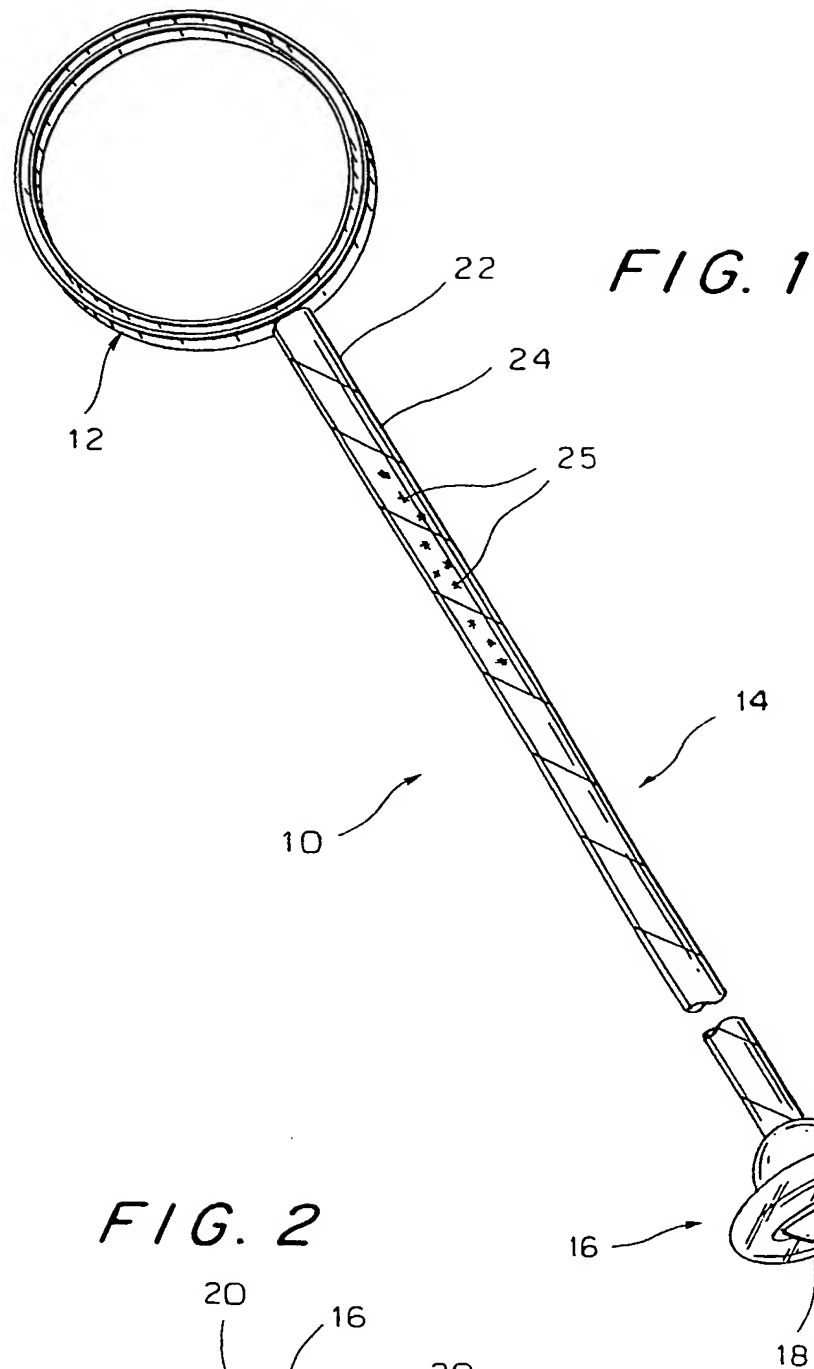
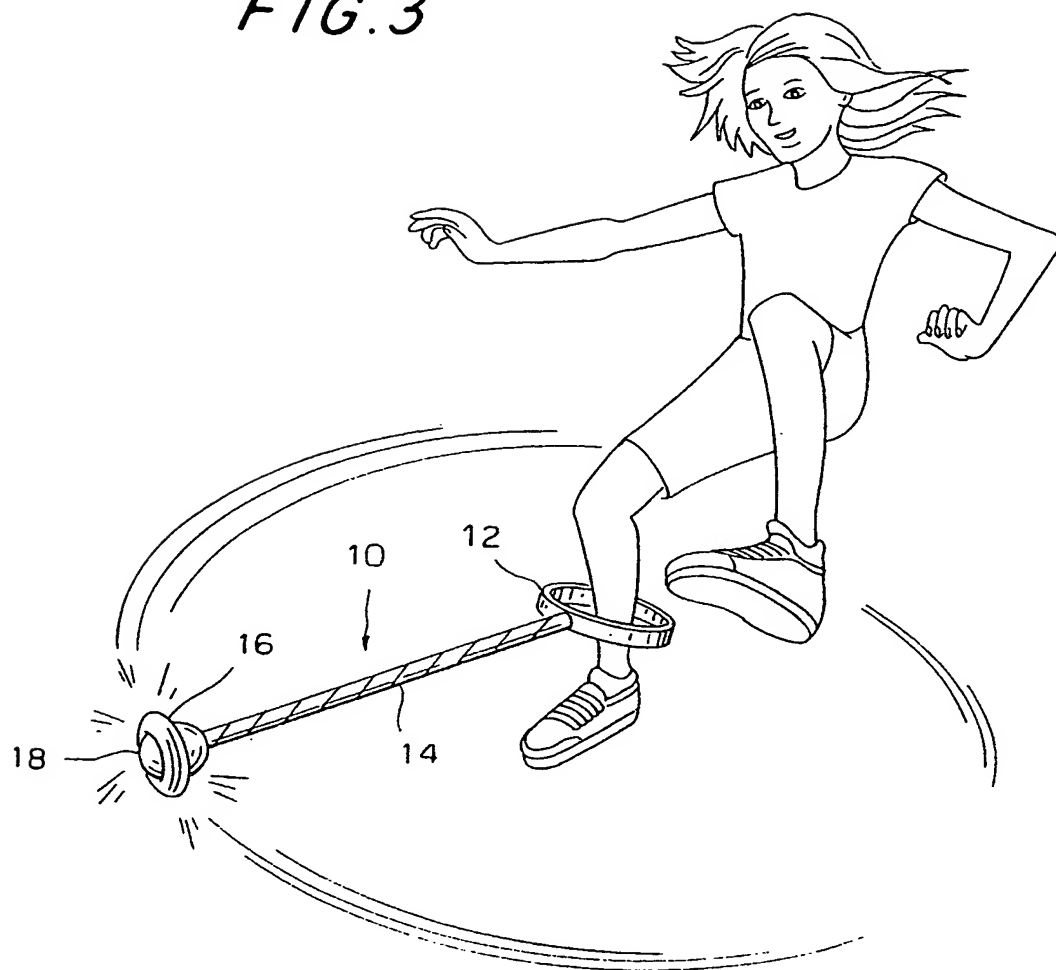


FIG. 3





# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US02/24058

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A63H 33/00

US CL : 446/26, 236

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 446/26, 236, 237, 242, 243, 246, 247, 411, 412, 484, 485

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
EAST

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6,113,452 A (MCGOWAN et al.) 05 September 2000, col 4, line 6 to col 6, line 33.	1-2
Y	US 5,603,651 A (SHURE et al.) 18 February 1997, col 2, lines 29-53.	1-4
Y	US 4,875,675 A (ARAD et al.) 24 October 1989, col 2, line 52 to col 3 line 35.	1-4
X	US 5,356,328 A (HO) 18 October 1994, col 2 lines 9-57.	1-2



Further documents are listed in the continuation of Box C.



See patent family annex.

\* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

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"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T"

later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

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document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y"

document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&"

document member of the same patent family

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10 October 2002 (10.10.2002)

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Name and mailing address of the ISA/US

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